

## **CLAIMS**

### **WHAT IS CLAIMED IS:**

**1. A method comprising:**

collecting a performance metric of a first partition in a logically-partitioned computer; and  
determining whether a difference between the performance metric and an expected performance metric exceeds a threshold, wherein the expected performance metric occurs when the first partition is an only partition in the logically-partitioned computer.

**2. The method of claim 1, wherein the performance metric comprises an average number of cycles per instruction for the first partition during an interval.**

**3. The method of claim 1, wherein the performance metric comprises processor utilization.**

**4. The method of claim 1, further comprising:**

shutting down a second partition in the logically-partitioned computer if the determining is true.

**5. The method of claim 1, further comprising:**

suspending a job in the second partition in the logically-partitioned computer if the determining is true.

**6. An apparatus comprising:**

means for collecting a performance metric of a plurality of jobs in a first partition in a logically-partitioned computer;

means for calculating a difference between the performance metric and an expected performance metric of each of the plurality of jobs, wherein the expected performance metric is based on a type of the plurality of jobs; and

means for reporting the difference.

7. The apparatus of claim 6, wherein the performance metric comprises an average number of cycles per instruction for the first partition during an interval.

8. The apparatus of claim 6, further comprising:

means for shutting down a second partition in the logically-partitioned computer if the difference exceeds a threshold.

9. The apparatus of claim 6, further comprising:

means for suspending a job in a second partition in the logically-partitioned computer if the difference exceeds a threshold.

10. A signal-bearing medium encoded with instructions, wherein the instructions when executed comprise:

collecting an average number of cycles per instruction of a plurality of jobs in a first partition in a logically-partitioned computer;

calculating a difference between the average number and an expected number of cycles per instruction of each of the plurality of jobs, wherein the expected number of cycles per instruction is based on a type of the plurality of jobs; and

reporting the difference.

11. The signal-bearing medium of claim 10, further comprising:

shutting down a second partition in the logically-partitioned computer if the difference exceeds a threshold.

12. The signal-bearing medium of claim 10, further comprising:

suspending a job in a second partition in the logically-partitioned computer if the difference exceeds a threshold.

13. A computer system having a plurality of logical partitions, the computer system comprising:

a processor; and

memory encoded with instructions, wherein the instructions when executed on the processor comprise:

collecting an average number of cycles per instruction of a first partition;

and

determining whether a difference between the average number of cycles per instruction and an expected number of cycles per instruction exceeds a threshold, wherein the expected number of cycles per instruction occurs when the first partition is an only partition in the computer system.

14. The computer system of claim 15, wherein the instructions further comprise:

shutting down a second partition in the logically-partitioned computer if the determining is true.

15. The computer system of claim 15, wherein the instructions further comprise:

suspending a job in the second partition in the logically-partitioned computer if the determining is true.

16. A method of configuring a logically-partitioned computer, wherein the method comprises:

configuring the computer to collect a performance metric of a first partition; and

configuring the computer to determine whether a difference between the performance metric and an expected performance metric exceeds a threshold, wherein the expected performance metric occurs when the first partition is an only partition in the logically-partitioned computer.

17. The method of claim 16, wherein the performance metric comprises an average number of cycles per instruction for the first partition during an interval.
18. The method of claim 16, wherein the performance metric comprises processor utilization.
19. The method of claim 16, further comprising:  
configuring the computer to shut down a second partition if the determining is true.
20. The method of claim 16, further comprising:  
configuring the computer to suspend a job in the second partition if the determining is true.